

CLAIMS

1. A shot-image-recording system comprising a shooting device for shooting an object and a signal-recording device for recording in a recording medium an image obtained by shooting the object with the
5 shooting device,

wherein said shooting device comprises:

shooting means for generating an image signal having a shooting frame rate from a shot image;

10 frame-addition-processing means for adding a frame on the basis of the image signal generated by the shooting means to obtain an image signal having an output frame rate in which the shot image is contained at a variable frame rate and outputting said image signal having the output frame rate and a validity
15 signal indicating frame of the image having the variable frame rate in said image signal having the output frame rate; and

shooting control means for controlling operations of the shooting means and the frame-addition-processing means on the basis of a frame-rate-setting signal, to control varying of the shooting frame rate and/or switching of the number of add frames
20 in the frame addition so that the variable frame rate may be set to a frame rate based on the frame-rate-setting signal, and

wherein the signal-recording device comprises:

storage means for storing the image signal temporarily;

25 storage control means for selecting an image signal of the image having the variable frame rate from among the image signal having the output frame rate on the basis of said validity signal and storing it in the storage means;

recording means for recording a signal in the recording medium; and

recording control means for recording the signal stored in the storage means in the recording medium intermittently at a predetermined recording frame rate in accordance with a signal quantity of the image signal stored in the storage means.

2. The shot-image-recording system according to claim 1, wherein the recording control means uses a phase difference between a write position and a read position for the signal as the signal quantity of the image signal stored in the storage means.

3. The shot-image-recording system according to claim 1, wherein the signal-recording device further comprises image compression means; wherein the image compression means compresses the image signal of the image having the variable frame rate; and

wherein the storage control means stores the compressed image signal in the storage means.

4. The shot-image-recording system according to claim 1, wherein the shooting control means generates additional information relevant to the image having the variable frame rate; and

wherein the storage control means stores the image signal of the image having the variable frame rate and the additional information in the storage means.

5. The shot-image-recording system according to claim 1, wherein the image signal having the output frame rate is a signal of a common data rate (CDR) system.

5 6. A signal-recording device for recording a signal using an image signal having an output frame rate in which an image having a variable frame rate is contained and a validity signal indicating a frame of the image having the variable frame rate with respect to the image signal, comprising:

10 storage means for storing the image signal temporarily;

 storage control means for selecting the image signal of the image having the variable frame rate from among the image signal on the basis of the validity signal and storing it in the storage means;

 recording means for recording the signal in the recording medium;

15 and

 recording control means for recording the signal stored in the storage means in the recording medium intermittently at a predetermined recording frame rate in accordance with a signal quantity of the image signal stored in the storage means.

20 7. The signal-recording device according to claim 6, wherein the recording control means uses a phase difference between a write position and a read position for the signal as the signal quantity of the image signals stored in the storage means.

25 8. The signal-recording device according to claim 6, further comprising image compression means, wherein the image compression means

compresses the image signal of the image having the variable frame rate;
and

wherein the storage control means stores the compressed image
signal in the storage means.

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9. The signal-recording device according to claim 6, wherein the
image signal having the predetermined output frame rate is a signal of
a common data rate (CDR) system.

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10. A signal-recording method for recording a signal using an
image signal having an output frame rate in which an image having a
variable frame rate is contained and a validity signal indicating a frame
of the image having the variable frame rate with respect to this image
signal, said method comprising the steps of:

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selecting the image signal of the image having the variable frame
rate from among the image signal on the basis of the validity signal and
storing it in the storage means; and

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recording the signal stored in the storage means in the recording
medium intermittently at a predetermined recording frame rate in
accordance with a signal quantity of the image signal stored in the
storage means.

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11. The signal-recording method according to claim 10, wherein
a phase difference between a write position and a read position for the
signal is used as the signal quantity of the stored image signal.

12. The signal-recording method according to claim 10, further
comprising the step of compressing the image signal of the image having

the variable frame rate, and storing the compressed image signal in the storage means.

13. The signal-recording method according to claim 10, wherein
5 the image signal having the output frame rate is a signal of a common data rate (CDR) system.